



THE GRAND BAHAMA PORT AUTHORITY, LIMITED

2nd March 2015

Ms. Lulamae Frith
Manager
Silver Point Condominiums
P.O. Box F-40825
Freeport, Grand Bahama

Dear Ms. Frith,

Building Inspection Report on Silver Point Apartment Building

In response to a concern received during the latter part of December 2014, a team of inspectors from the Building Department of The Grand Bahama Port Authority, Limited visited the Silver Point Apartment Building. They compiled the attached report.

In essence, the physical state of the subject building requires the following works in order to bring it into code compliance. A building permit is required for all proposed works.

Civil/Structural

Substantial concrete spalling exists with severely corroded reinforcing steel rods. Conditions exist to make it necessary to have the entire structure, particularly the balcony slabs, inspected by an independent structural engineer. The engineer should present his report with instructions/designs for the necessary repairs. (See Inspectors' report).

Electrical

None of the sub-meter rooms is properly ventilated.

Fire detection devices are missing from the elevator rooms.

A cover to a trough in the main electric room, and a cover to a junction box at the front of the pool equipment room is missing.

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These conditions are not code-compliant.

Mechanical

The fire water pump system for the fire hose cabinets does not work automatically (during a fire emergency). This system must be upgraded to operate automatically in accordance with building code requirements.

Plumbing

The “no-hub coupling” bands at the venting systems in most of the laundry rooms are defective.

All water heaters are missing a discharge pipe to connect into from the temperature relief valves.

All public toilets require “open front” toilet seats.

Adequate supports should be provided to water pipes from/to the holding tanks.

All of these are code violations.

We trust that you would address these items within reasonable time.

Yours sincerely,

THE GRAND BAHAMA PORT AUTHORITY, LIMITED



Arthur Jones
Vice President

Building & Development Services

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Attachment

cc: Messrs. Allison Campbell
Dudley Francis
Sherwin Mullings
Renardo Karageorgiou

Mrs. Margaret M. Groves



THE GRAND BAHAMA PORT AUTHORITY GROUP OF COMPANIES

INTER-OFFICE MEMORANDUM

DATE: January 29th 2015

TO: Mess'rs. Arthur Jones and Allison Campbell

FROM: Dudley Francis, Donovan Cox, Gregory Saunders, Sherwin Mullings, Nicholson Miller, Renardo Karageorgiou

Cc: Mess'rs. Stephen Williams, Rico Cargill, Andrew Burrows and Mrs. Olethea Zonicle

SUBJECT: **Silver Point Condominiums – Bahama Reef Section 2, Tract C (A Portion of) Group Inspection**

INTRODUCTION

At the request of the Director of the Building and Development Services Department of the Grand Bahama Port Authority, Mr. Arthur Jones, a team of inspectors from that Department namely; Dudley Francis, Nicholson Miller, Renardo Karageorgiou, Sherwin Mullings, Gregory Saunders, Donovan Cox, Stephen Williams, Rico Cargill, Andrew Burrows and Mrs. Olethea Zonicle conducted a walk about inspection of the above subject facility on January 8, 2015. The purpose of the inspection was to identify code infractions at the facility in an effort to ensure that compliance of the same is maintained.

THE FACILITY

The facility being inspected is an eight (8) story residential apartment complex with; reinforced concrete columns, reinforced concrete beams and Cement masonry units (CMU) at the exterior walls. The building is semi-circular in shape and arches from east to west on a portion of Bahama Reef tract "C", with reinforced concrete balcony slabs and concrete rails from the second floor to the eighth floor. There are four (4) apartment units on the ground floor, four apartment units on the eighth (8th) floor and ten (10) apartment units on every other floor, giving a total of sixty eight (68) apartment units. The means of egress throughout the building includes; one (1) stairwell at the eastern end, one (1) centrally located stairwell, and one (1) stairwell at the western end of the building for a total of three (3) separate stairwells along with two (2) centrally located elevator systems.

The ground floor level of the building comprises of an open "Breeze-Way" area overlooking the rear southern swimming pool. The concrete ceiling just below the second floor in this area is supported by reinforced concrete columns and beams that are exposed to the elements.

THE FINDINGS

During the inspection, the areas of concern were mainly on the exterior common areas such as the exterior northern facing balconies and the stairwells also located to the north of the building. The findings from the inspection are as follow:

1. At the eighth (8th) floor, moderate concrete crack defects were identified within the eastern stairwell at the CMU walls. More moderate concrete crack defects were identified along the exterior CMU walls and reinforced concrete columns close to room #82, as well as along the exterior northern facing concrete balcony rail.
2. At the seventh (7th) floor, moderate concrete crack defects were identified; at the interior walls of the western stairwell, at the exterior CMU wall of room 74, at the base of the exterior CMU wall near room 71 and at the interior concrete landing of the eastern stairwell.
3. Moderate concrete crack defects were identified on the sixth (6th) floor within the ceiling at room #64 and in the laundry. Within the western stairwell, severe concrete crack defects were identified at the floor in the area of the base of the post for the stair landing handrail.
4. At the fifth (5th) floor laundry room, there are moderate concrete crack defects at the ceiling. At the eastern stairwell, there are moderate, concrete crack defects along the walls and the concrete floor. Also, at the fifth (5th) floor, there are severe, concrete crack defects at the exterior CMU wall just outside the eastern stairwell.
5. At the fourth (4th) floor near the laundry room, moderate concrete crack defects were identified at the CMU wall next to the exterior door and along the ceiling. Moderate concrete crack defects were also identified at the western stairwell exterior CMU wall. At the fourth (4th) floor interior western stairwell, moderate concrete defects were also identified at the base of the post for the stair landing handrail.
6. Between the fourth (4th) and third (3rd) floors, severe concrete crack defects were observed at the base of the post for the stair landing handrail support.
7. There were noticeable changes to the floor tiling at the third (3rd) floor balcony towards the western end of the building between the central elevator shaft and western stairwell areas, as an indication of alteration works done to that floor slab.
8. The western section of the second (2nd) floor between the central elevator shaft area and the western stairwell showed signs of significant unevenness in the floor level.
9. The reinforced concrete beams that are exposed to the elements at the ground floor showed signs of severe, concrete crack defects in some areas along with certain sections of the reinforced concrete ceiling. At some of the defective beams repair works were already in progress without a valid building permit. Some of the concrete crack defects were about to fall away posing a potential threat to the occupants of the facility.



Photo #1 - illustrating moderate concrete crack defects within the eastern stairwell.



Photo #2 - illustrating moderate to severe concrete crack defects within the western stairwell.



Photo #3 - illustrating severe, concrete crack defects within the ceiling at south-west ground floor ceiling areas exposed to the elements at the open "Breeze-way" areas.



Photo #4 - illustrating moderate, concrete crack defects at the eighth (8th) floor near room #82.



Photo #5 illustrating a moderate concrete crack defect at the base of the CMU wall within the walkway area.



Photo #6 illustrating moderate concrete crack defects within the ceiling of the walkway.



Photo #7 illustrating severe concrete crack defects within the Laundry room at the Sixth floor.



Photo #8 illustrating severe concrete crack at the exterior CMU wall at the south-east section.



Photo #9 illustrating moderate concrete crack defects at the eastern stairwell CMU walls.



Photo #10 illustrating moderate concrete crack defects at the ceiling of the south western ground floor breeze-way area.



Photo #11 illustrating moderate, concrete crack defects at the concrete ceiling of the southern breezeway area.



Photo #12 illustrating moderate concrete crack defects at the reinforced concrete beam supporting the second (2nd) Floor concrete floor slab at the south western ground floor breezeway area.



Photo#13 illustrating moderate, concrete crack defects at the CMU balcony rail.

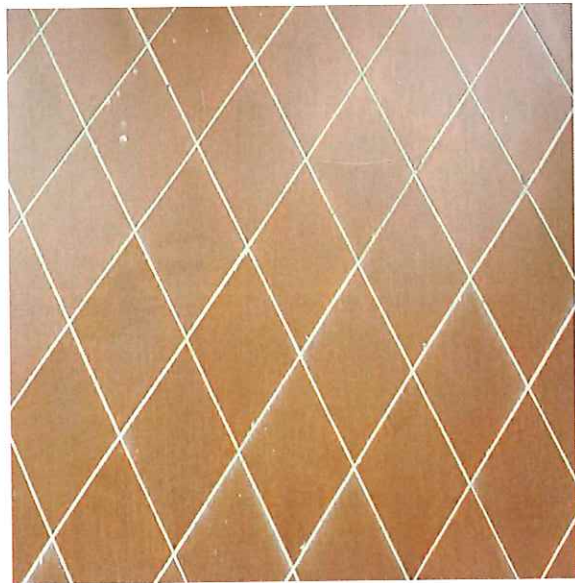


Photo #14 illustrating newly laid tiles as an indication that work was done recently to this area on the 3rd floor balcony located between the central elevator and the western stairwell.



Photo#15 illustrating severe concrete crack defects at the southern CMU balcony rails.



Photo #16 illustrating severe concrete crack defects at the reinforced concrete columns supporting the first level concrete beams at the south western breezeway area.

ANALYSIS

Most of the concrete defects identified at the CMU and reinforced concrete walls, beams, columns and floors were moderate to severe in nature with rebars exposed and severely corroded in some places. The defects are normal for a reinforced concrete and masonry structure of this type and age in such close proximity to the beach with constant "salt-air" to the south of the property. The defects can be significantly reduced with a strategic action plan for repairs based on recommendations from a GBPA licensed structural engineer of record.

After consulting with the Building Manager of Silver Point Condominium Apartments (Ms. Lula Frith), the GBPA's inspection team was informed that some structural repairs were done in the past to the western concrete floor slab at the third (3rd) floor level, under the supervision of engineer Mr. Philip English. No records were found on file at the G.B.P.A.'s Building & Development Services Department for that repair work.

CONCLUSION

All concrete defects should be repaired based on the recommendations from a GBPA's licensed structural engineer of record. Rebars that are severely corroded should be replaced where necessary based on the engineer's report. If the defects are left un-attended for much longer they will only get worst and possibly lead to injuries to the occupants of the building.

Based on the floor observation at the third floor, western balcony floor and the information received from Ms. Lula Frith, the Building Manager of the Silver Point Condominium Apartments, a conclusion can be drawn that repair works were done to the western third (3rd) floor balcony slab.

There is a need for all the balcony floors to be checked by a GBPA's licensed independent structural engineer of record with recommendations for any repair works that need to be done, especially at the second (2nd) floor western balcony floor slab.

RECOMMENDATIONS

A valid building permit is required for the repair works related to all concrete defects. The building permit application should be accompanied by an up to date report from a GBPA licensed structural engineer of record with recommendations for the repair procedure to be followed for the remaining works to be done. The engineer's report should also provide verification as to whether or not the repair works that were done in the past (especially for the third 3rd floor balcony slab) were done to satisfy the requirements of the GBPA's Building & Sanitary Code and The Bahamas building Code.

If the engineer of record finds non-compliance at the facility, then recommendations should be made by the engineer to ensure compliance with all relevant Building codes.

The Facility

Situated on a portion of Tract C in Bahama Reef Yacht & Country Club 2 is an apartment complex known as Silver Point Condominiums, built in 1964. This U/half-moon shaped white building has eight (8) floors consisting of 68 residential units, two (2) elevators, three (3) internal stair cases (one in the center of the building and one on either side of the building), six sub-meter rooms, one main electrical room, an electric vault, auxiliary system, swimming pool, an equipment room for the pool equipment, and sewer system.

Electrical Findings

The inspection revealed that the electrical system in this aged building is well kept with a good maintenance program. Each stairwell has an emergency light at each landing. Of the twenty four lights installed only one was not operational.

Perhaps due to the age of this building none of the sub-meter rooms are ventilated. There are no fire detection devices in either of the elevator equipment rooms; and of the numerous junction boxes and troughs in and around the building, one trough cover is missing in the main electric room; and a J-box cover is missing in front of the pool equipment room.

Recommendations

- Ventilation should be added to all the sub-meter rooms (code requirement); this will help the doors of these rooms not to swell and reduce the force required to shut them.
- Detection devices should be installed in the elevators machine room.
- All missing covers should be installed.

Mechanical Findings:

The two elevators, one located on the west side of the building, and the other on the east side were working normally during our inspection.

The portable fire extinguishers had all recently been inspected and serviced by Ozone Company Limited. Ozone is a company licensed to inspect and service portable fire extinguishers inside the Grand Bahama Port Authority Area.

The fire water pump system for the fire hose cabinets located on the various floors was found not to be set up to work automatically during a fire emergency. This system **must** be upgraded to operate automatically in the event of a fire emergency anywhere inside the building.

Analysis

- 1) The fire pump system inside the building is currently not designed to operate automatically in the event of a fire emergency. Section 3706.5 requires that fire pumps operate automatically in the event of a fire emergency.

Conclusion

- 1) The mechanical systems inside the building appear to be well maintained.
- 2) The fire pump system is not in compliance with the Bahamas Building Code and therefore must be upgraded.

Recommendations

- 1) Procure the services of a mechanical/fire protection engineer to evaluate the fire water system for the building and upgrade to ensure compliance with the code.

Plumbing Findings:

1. The Ground Floor consists of a Mechanical Room, four apartments, two restrooms, the lobby area and receptionist office.
2. Typical Floors 2 – 7 consists of ten condo units, a laundry room and a storage closet per floor.
3. The eighth floor consists of four condo units.

During the cursory inspection in the building's common areas it was noticed that in most of the laundry rooms, that the cast iron sanitary and venting system have defective no-hub coupling bands. All of the water heaters temperature relief valves need a discharge pipe. The public toilets in the restrooms need to be furnished with open front toilet seats. The water service piping for the holding tanks needs to be supported.

The visual inspection revealed that the regulatory requirement for the plumbing system was installed in the proper manner such as the following:-


1. Performance requirement which include flow, velocity, pressure and discharge.
2. Pipe fixings which include anchors, hanging bracket.
3. Materials which include cast iron, copper, and PVC
4. Requirement method measures to prevent the spread of fire and sound attenuation

The scope of the inspection was not based on the interpretation of the plans and specifications since they were not available.


Plumbing Photograph:



Photo #1- Illustrating that the water heater relief valves require a discharge pipe.



Dudley Francis, P.E.



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